

Claims

- [1] A satellite simulation modeling system based on an interface standard model, the system comprising:
a satellite subsystem standard model for simulating operations of physical satellite subsystems;
a flight software module for generating a control signal changing operation state of the satellite subsystem standard model;
an interface standard model for converting data transmitted from the satellite subsystem standard model and the flight software module into data to receiving components and transmitting the converted data to the receiving components;
and
a model managing means for generating the satellite subsystem standard model and the interface standard model as independent component objects and controlling each component object to perform satellite simulation.
- [2] The system as recited in claim 1, wherein the interface standard model includes data processing information and data link information, and wherein the data processing information and the data link information are modified when the satellite subsystems standard model is changed.
- [3] The system as recited in claim 1, wherein the interface standard model includes:
a data processor for converting data transmitted from the satellite subsystem standard model and the flight software module to data appropriate to the receiving component based on characteristics and a structure of the data;
a data information provider for extracting the data link information and the data processing information stored in a data storage and providing the data link information and the data processing information to the data processor;
the data storage for storing the data link information and the data processing information; and
a data port for receiving the data from the satellite subsystem standard model and the flight software module and transmitting the data processed in the data processor to the receiving components.
- [4] The system as recited in claim 3, wherein the data processor converts telemetry data transmitted from the satellite subsystem standard model to data appropriate to the flight software according to characteristics and a structure of the telemetry data and converts telecommand data transmitted from the flight software module

to data appropriate to the satellite subsystem standard module based on telecommand data processing information according to characteristics and a structure of the telecommand data.